

01/16



OIIPE

RAW SEQUENCE LISTING

DATE: 02/01/2002

PATENT APPLICATION: US/09/934,773

TIME: 11:35:57

Input Set : N:\Crf3\RULE60\09934773.raw

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1 <110> APPLICANT: Reiter, Robert E.
2 Witte, Owen N.
3 Saffran, Douglas C.
4 <120> TITLE OF INVENTION: PSCA: PROSTATE STEM CELL ANTIGEN AND USES THEREOF
5 <130> FILE REFERENCE: 30435.54USI4
6 <140> CURRENT APPLICATION NUMBER: US/09/934,773
7 <141> CURRENT FILING DATE: 2001-08-21
8 <150> PRIOR APPLICATION NUMBER: 09/564,329
9 <151> PRIOR FILING DATE: 2000-05-03
10 <150> PRIOR APPLICATION NUMBER: 09/359,326
11 <151> PRIOR FILING DATE: 1999-07-20
12 <150> PRIOR APPLICATION NUMBER: 08/814,279
13 <151> PRIOR FILING DATE: 1997-03-10
14 <150> PRIOR APPLICATION NUMBER: 60/071,141
15 <151> PRIOR FILING DATE: 1998-01-12
16 <150> PRIOR APPLICATION NUMBER: 60/074,675
17 <151> PRIOR FILING DATE: 1998-02-13
18 <150> PRIOR APPLICATION NUMBER: 60/113,230
19 <151> PRIOR FILING DATE: 1998-12-21
20 <150> PRIOR APPLICATION NUMBER: 60/120,536
21 <151> PRIOR FILING DATE: 1999-02-17
22 <150> PRIOR APPLICATION NUMBER: 60/124,658
23 <151> PRIOR FILING DATE: 1999-03-16
24 <150> PRIOR APPLICATION NUMBER: 09/038,261
25 <151> PRIOR FILING DATE: 1998-03-10
26 <150> PRIOR APPLICATION NUMBER: 09/203,939
27 <151> PRIOR FILING DATE: 1998-12-02
28 <150> PRIOR APPLICATION NUMBER: 09/251,835
29 <151> PRIOR FILING DATE: 1999-02-17
30 <150> PRIOR APPLICATION NUMBER: 09/308,503
31 <151> PRIOR FILING DATE: 1999-05-25
32 <160> NUMBER OF SEQ ID NOS: 27
33 <170> SOFTWARE: PatentIn Ver. 2.0
35 <210> SEQ ID NO: 1
36 <211> LENGTH: 998
37 <212> TYPE: DNA
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43 <221> NAME/KEY: misc_feature
44 <222> LOCATION: (580)

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75      tgcagccagg cactgccctg ctgtgtact cctgcaaagc ccaggtgagc aacgaggact 120
76      gcctgcaggt ggagaactgc acccagctgg gggagcagtg ctggaccgcg cgcacccgcg 180
77      cagttggcct cctgaccgtc atcagcaaag gctgcagctt gaactgcgtg gatgactcac 240
78      aggactacta cgtgggcaag aagaacatca cgtgctgtga caccgacttg tgcaacgcca 300
79      gcggggccca tgccctgcag ccggctgccg ccaccccttc gctgctccct gcactcggcc 360
80      tgctgctctg gggacccggc cagctatagg ctctgggggg ccccgctgca gcccacactg 420
81      ggtgtggtgc cccaggcctt tgtgccactc ctcacagaac ctggcccagt gggagcctgt 480
82      cctggttctt gaggcacatc ctaacgcaag tttgaccatg tatgtttgca ccccttttcc 540
W--> 83      ccnaaccctg accttcccat gggccttttc caggattccn accnggcaga tcagttttag 600
W--> 84      tganacanat ccgcntgcag atggcccctc caaccntttn tgttgntggt tccatggccc 660
W--> 85      agcattttcc acccttaacc ctgtgttcag gcacttnttc ccccaggaag ccttccctgc 720
86      ccaccccatc tatgaattga gccagggttg gtccgtggtg tccccgcgac ccagcagggg 780
87      acaggcaatc aggagggccc agtaaaggct gagatgaagt ggactgagta gaactggagg 840
88      acaagagttg acgtgagttc ctgggagttt ccagagatgg ggccctggagg cctggaggaa 900
W--> 89      ggggccaggc ctcacatttg tgggntccc gaatggcagc ctgagcacag cgtaggccct 960
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92 <210> SEQ ID NO: 2
93 <211> LENGTH: 123
94 <212> TYPE: PRT

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95 <213> ORGANISM: HUMAN PSCA (hPSCA)
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98 <222> LOCATION: (50)..(64)
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100 <222> LOCATION: (71)..(82)
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102 <222> LOCATION: (67)..(81)
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106   Pro Gly Thr Ala Leu Leu Cys Tyr Ser Cys Lys Ala Gln Val Ser Asn
107           20           25           30
108   Glu Asp Cys Leu Gln Val Glu Asn Cys Thr Gln Leu Gly Glu Gln Cys
109           35           40           45
110   Trp Thr Ala Arg Ile Arg Ala Val Gly Leu Leu Thr Val Ile Ser Lys
111       50           55           60
112   Gly Cys Ser Leu Asn Cys Val Asp Asp Ser Gln Asp Tyr Tyr Val Gly
113       65           70           75           80
114   Lys Lys Asn Ile Thr Cys Cys Asp Thr Asp Leu Cys Asn Ala Ser Gly
115           85           90           95
116   Ala His Ala Leu Gln Pro Ala Ala Ala Ile Leu Ala Leu Leu Pro Ala
117           100          105          110
118   Leu Gly Leu Leu Leu Trp Gly Pro Gly Gln Leu
119       115          120
121 <210> SEQ ID NO: 3
122 <211> LENGTH: 441
123 <212> TYPE: DNA
124 <213> ORGANISM: MURINE PSCA (mPSCA)
125 <400> SEQUENCE: 3
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127   ctgcagtgtt attcatgcac agcacagatg aacaacagag actgtctgaa tgtacagaac 120
128   tgcagcctgg accagcacag ttgctttaca tcgcgcatcc gggccattgg actcgtgaca 180
129   gttatcagta agggctgcag ctcacagtgt gaggatgact cggagaacta ctatttgggc 240
130   aagaagaaca tcacgtgctg ctactctgac ctgtgcaatg tcaacggggc ccacaccctg 300
131   aagccaccca ccaccctggg gctgctgacc gtgctctgca gcctgttgct gtggggctcc 360
132   agccgtctgt aggtctctggg agagcctacc atagcccgat tgtgaaggga tgagctgcac 420
133   tccacccccc cccacacag g                                     441
135 <210> SEQ ID NO: 4
136 <211> LENGTH: 123
137 <212> TYPE: PRT
138 <213> ORGANISM: MURINE PSCA (mPSCA)
139 <400> SEQUENCE: 4
140   Met Lys Thr Val Phe Phe Ile Leu Leu Ala Thr Tyr Leu Ala Leu His
141       1           5           10           15
142   Pro Gly Ala Ala Leu Gln Cys Tyr Ser Cys Thr Ala Gln Met Asn Asn
143           20           25           30
144   Arg Asp Cys Leu Asn Val Gln Asn Cys Ser Leu Asp Gln His Ser Cys
145       35           40           45

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146   Phe Thr Ser Arg Ile Arg Ala Ile Gly Leu Val Thr Val Ile Ser Lys
147       50              55              60
148   Gly Cys Ser Ser Gln Cys Glu Asp Asp Ser Glu Asn Tyr Tyr Leu Gly
149       65              70              75              80
150   Lys Lys Asn Ile Thr Cys Cys Tyr Ser Asp Leu Cys Asn Val Asn Gly
151              85              90              95
152   Ala His Thr Leu Lys Pro Pro Thr Thr Leu Gly Leu Leu Thr Val Leu
153              100              105              110
154   Cys Ser Leu Leu Leu Trp Gly Ser Ser Arg Leu
155              115              120
157 <210> SEQ ID NO: 5
158 <211> LENGTH: 131
159 <212> TYPE: PRT
160 <213> ORGANISM: HUMAN STEM CELL ANTIGEN (hSCA-2)
161 <400> SEQUENCE: 5
162   Met Lys Ile Phe Leu Pro Val Leu Leu Ala Ala Leu Leu Gly Val Glu
163       1              5              10              15
164   Arg Ala Ser Ser Leu Met Cys Phe Ser Cys Leu Asn Gln Lys Ser Asn
165              20              25              30
166   Leu Tyr Cys Leu Lys Pro Thr Ile Cys Ser Asp Gln Asp Asn Tyr Cys
167              35              40              45
168   Val Thr Val Ser Ala Ser Ala Gly Ile Gly Asn Leu Val Thr Phe Gly
169              50              55              60
170   His Ser Leu Ser Lys Thr Cys Ser Pro Ala Cys Pro Ile Pro Glu Gly
171       65              70              75              80
172   Val Asn Val Gly Val Ala Ser Met Gly Ile Ser Cys Cys Gln Ser Phe
173              85              90              95
174   Leu Cys Asn Phe Ser Ala Ala Asp Gly Leu Arg Ala Ser Val Thr
175              100              105              110
176   Leu Leu Gly Ala Gly Leu Leu Leu Ser Leu Leu Pro Ala Leu Leu Arg
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178   Phe Gly Pro
179       130
181 <210> SEQ ID NO: 6
182 <211> LENGTH: 123
183 <212> TYPE: PRT
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185 <400> SEQUENCE: 6
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187       1              5              10              15
188   Pro Gly Thr Ala Leu Leu Cys Tyr Ser Cys Lys Ala Gln Val Ser Asn
189              20              25              30
190   Glu Asp Cys Leu Gln Val Glu Asn Cys Thr Gln Leu Gly Glu Gln Cys
191              35              40              45
192   Trp Thr Ala Arg Ile Arg Ala Val Gly Leu Leu Thr Val Ile Ser Lys
193              50              55              60
194   Gly Cys Ser Leu Asn Cys Val Asp Asp Ser Gln Asp Tyr Tyr Val Gly
195       65              70              75              80
196   Lys Lys Asn Ile Thr Cys Cys Asp Thr Asp Leu Cys Asn Ala Ser Gly

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197          85          90          95
198      Ala His Ala Leu Gln Pro Ala Ala Ala Ile Leu Ala Leu Leu Pro Ala
199          100          105          110
200      Leu Gly Leu Leu Leu Trp Gly Pro Gly Gln Leu
201          115          120
203 <210> SEQ ID NO: 7
204 <211> LENGTH: 123
205 <212> TYPE: PRT
206 <213> ORGANISM: MURINE PSCA (mPSCA)
207 <400> SEQUENCE: 7
208      Met Lys Thr Val Leu Phe Leu Leu Leu Ala Thr Tyr Leu Ala Leu His
209          1          5          10          15
210      Pro Gly Ala Ala Leu Gln Cys Tyr Ser Cys Thr Ala Gln Met Asn Asn
211          20          25          30
212      Arg Asp Cys Leu Asn Val Gln Asn Cys Ser Leu Asp Gln His Ser Cys
213          35          40          45
214      Phe Thr Ser Arg Ile Arg Ala Ile Gly Leu Val Thr Val Ile Ser Lys
215          50          55          60
216      Gly Cys Ser Ser Gln Cys Glu Asp Asp Ser Glu Asn Tyr Tyr Leu Gly
217          65          70          75          80
218      Lys Lys Asn Ile Thr Cys Cys Tyr Ser Asp Leu Cys Asn Val Asn Gly
219          85          90          95
220      Ala His Thr Leu Lys Pro Pro Thr Thr Leu Gly Leu Leu Thr Val Leu
221          100          105          110
222      Cys Ser Leu Leu Leu Trp Gly Ser Ser Arg Leu
223          115          120
225 <210> SEQ ID NO: 8
226 <211> LENGTH: 20
227 <212> TYPE: DNA
228 <213> ORGANISM: Artificial Sequence
229 <220> FEATURE:
230 <223> OTHER INFORMATION: Description of Artificial Sequence: RT-PCR PRIMER
231 <400> SEQUENCE: 8
232      ttctcctgct ggccacctac 20
234 <210> SEQ ID NO: 9
235 <211> LENGTH: 20
236 <212> TYPE: DNA
237 <213> ORGANISM: Artificial Sequence
238 <220> FEATURE:
239 <223> OTHER INFORMATION: Description of Artificial Sequence: RT-PCR PRIMER
240 <400> SEQUENCE: 9
241      gcagtcctac ccttcacaat 20
243 <210> SEQ ID NO: 10
244 <211> LENGTH: 408
245 <212> TYPE: DNA
246 <213> ORGANISM: SCID Mice
247 <400> SEQUENCE: 10
248      tgcttcttcc tgatggcagt gggttatagga gtcaattcag aggttcagct gcagcagtct 60
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VERIFICATION SUMMARY

PATENT APPLICATION: US/09/934,773

DATE: 02/01/2002

TIME: 11:35:58

Input Set : N:\Crf3\RULE60\09934773.raw

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L:84 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
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L:89 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1